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(54) **METHOD OF MAKING SHAPED PIEZOELECTRIC COMPOSITE TRANSDUCER**

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(58) **Field of Search** 29/25.35, 592.1, 29/594, 602.1, 609.1, 856, 868; 310/333–337, 357, 367, 368; 264/272.11, 272.16

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(57) **ABSTRACT**

A method for making a piezoelectric composite transducer is disclosed. A block of piezoelectric material having a common base and a plurality of uniform-length rods is utilized. An electric conductor is positioned to extend through a side region of the block. Spaces between the rods are filled up to a first surface region with a viscoelastic material. The common base of the block is removed forming a second surface region. Electrodes are deposited at the first surface region to be in contact with the rods and in electrical contact with the electric conductors. A ground electrode is deposited at the second surface region to be in contact with the rods. The resulting piezoelectric composite transducer can be heated and shaped to conform to complex curves.

7 Claims, 2 Drawing Sheets